

| National Imaging Associates, Inc.* | |
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| Clinical guidelines CT (VIRTUAL) COLONOSCOPY | Original Date: July 2007 |
| CPT Codes: 74263 - Screening | Last Revised Date: April 202 21 |
| Guideline Number: NIA_CG_033-2 | Implementation Date: January 202 32 |

INDICATIONS FOR CT COLONOGRAPHY (VIRTUAL COLONOSCOPY) SCREENING

- CT (computer tomographic) colonography (CTC) is considered medically appropriate as an alternative to colonoscopy for screening asymptomatic individuals in the following settings:
 - For average or moderate risk individuals[‡] as defined below:
 - Age ≥ 45 -~~75~~ years, for initial screening and every 5 years after initial negative screen¹⁻³ ~~(ACS, 2018)~~
 - Screening to age 75 or ≤ 10 years of life expectancy
 - One time screening age 76- 85 if no prior study has been completed (depending on comorbidities and life expectancy)
 - When ~~endoscopy~~ colonoscopy is medically contraindicated or not possible (e.g., due to a known colonic lesion, structural abnormality, or technical difficulty, patient is unable to undergo sedation or has medical conditions such as recent myocardial infarction, recent colonic surgery, a bleeding disorder, or severe lung and/or heart disease)
 - For a patient with a first-degree family member with history of colorectal cancer or adenoma
 - After a positive fecal occult blood test (FOBT) or positive fecal immunochemical test (FIT)
 - For a patient at above average risk with a documented reason for not having a colonoscopy

[‡]For Average **or Moderate Risk Individuals:**

- 50 – 75 years of age, Asymptomatic **AND WITHOUT** any of the following:
 - A family history of known genetic disorders that predispose them to a high lifetime risk of colorectal cancer^{1, 4-6**} ~~(ACR, 2019; ACS, 2018; NCCN, 2019; Rex, 2017)~~ (See background section)
 - A personal history of inflammatory bowel disease^{1, 4-6**} ~~(ACR, 2019; ACS, 2018; NCCN, 2019; Rex, 2017)~~

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****Patients with these indications should undergo colonoscopy.**

NOTE: If a polyp 6mm or larger is detected at screening CTC, and no polypectomy is done, the follow-up CTC (done at 3 years) is then considered diagnostic (rather than screening).

BACKGROUND

The goal of CTC, sometimes referred to as CT colonography or virtual colonoscopy screening, is to reduce colorectal cancer mortality through cancer prevention and early detection. Virtual colonoscopy is an American Cancer Society-recommended screening exam that has been shown in studies in the United States and abroad to increase screening rates where offered. Virtual colonoscopy has been proven comparably accurate to colonoscopy in most people of screening age. Mandatory insurance coverage of CT colonography and the other USPSTF-recognized exams is a major step forward in the battle against colorectal cancer ~~(USPSTF, 2016)~~.⁷ CT colonography has replaced double-contrast barium enema for nearly all indications as it is more effective and better tolerated.

OVERVIEW

CTC is a minimally invasive structural examination of the colon and rectum to evaluate for colorectal polyps or neoplasms in the asymptomatic patient. These guidelines have been updated based on revised ACR Appropriateness Criteria® for Colorectal Cancer Screening for average or moderate risk individuals, which references the American College of Radiology Imaging Network (ACRIN) National CTC Trial. ACRIN is the largest multicenter trial to date with 2,531 asymptomatic patients included. The per patient sensitivity for detecting adenomas >6 mm was 78%, ≥10 mm was 84%. Of the 105 references used for this revised 2018 ACR guideline, 98 are categorized as diagnostic references. The 2021 NCCN guidelines recommend CT colonography every 5 years with a sensitivity of 96% for colorectal cancer (colonoscopy 95%), and specificity of 86%-98% (polyps ≥ 10mm; 80%-93% ≥ 6mm) vs 90% for colonoscopy ~~(NCCN, 2021)~~.⁵

Relative contraindications to CTC include symptomatic acute colitis, acute diarrhea, recent acute diverticulitis, recent colorectal surgery, symptomatic colon-containing abdominal wall hernia, small bowel obstruction, Lynch syndrome, Polyposis syndromes including classical familial adenomatous polyposis, attenuated familial adenomatous polyposis, MUTYH-associated polyposis, Peutz-Jeghers syndrome, Juvenile polyposis syndrome, Cowden syndrome/PTEN hamartoma tumor syndrome, and Li-Fraumeni syndrome ~~(NCCN, 2021)~~.⁵

It is not indicated for routine follow up of inflammatory bowel disease, hereditary polyposis or non-polyposis cancer syndromes, evaluation of anal disease, or the pregnant or potentially pregnant patient. For all high-risk individuals, colonoscopy is preferred.

Other Recommendations

It is suggested that screening begin in African Americans at age 45 years. It should also be noted that the American Cancer Society now recommends that screening be initiated starting at age 45; and recommends 6 test options for CRC screening; annual FIT or HSgFOBT (high-sensitivity, guaiac-based fecal occult blood test), mt-sDNA every three years, colonoscopy every 10 years, CTC every 5 years, and flexible sigmoidoscopy (FS) every 5 years ~~(Wolf, 2018)~~.⁸

POLICY HISTORY

| Date | Summary |
|-------------------|---|
| <u>April 2022</u> | <ul style="list-style-type: none">• <u>Updated references</u> |
| August 2021 | <ul style="list-style-type: none">• Changed age at initial screening from age ≥ 50 to ≥ 45 yrs old per ACS; removed specified screening age for African Americans, as it is reflected in overall age update |
| April 2021 | <ul style="list-style-type: none">• Added Note: If a polyp 6mm or larger is detected at screening cTC, and no polypectomy is done, the follow up CTC (done at 3 years) is then considered diagnostic (rather than screening) |
| May 2020 | <ul style="list-style-type: none">• Now approvable every 5 years for asymptomatic screening from age 50-75 (45 in African Americans) for average to moderate risk individuals• Listed indications for colonoscopy rather than virtual including inflammatory bowel disease, cancer syndromes |
| April 2019 | <ul style="list-style-type: none">• Corrected terminology to “CT Colonography” and “Virtual Colonoscopy”• Added indication: “Average risk individuals after positive fecal occult blood test or positive fecal immunochemical test indicating a relative elevation in risk• Added Background information regarding the difference between screening and surveillance• Updated references |

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~~Weinberg DS, Pickhardt PJ, Bruining DH, et al. Computed tomography colonography vs colonoscopy for colorectal cancer surveillance after surgery. *Gastroenterol*. 2018 Mar; 154(4):927–34. Epub 2017 Nov 22.~~

~~Wolf AMD, Fontham ETH, Church TR, et al. Colorectal cancer screening for average-risk adults: 2018 guideline update from the American Cancer Society. *CA Cancer J Clin*. 2018;68(4):250-281. doi:10.3322/caac.21457.~~

~~Reviewed / Approved by NIA Clinical Guideline Committee~~

GENERAL INFORMATION

It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.

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ADDITIONAL RESOURCES

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